AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

1. (Original) A resonant circuit comprising:

a substrate having a planar surface;

at least one resonator formed from a high temperature superconducting material formed on the substrate, the resonator having one or more turns, when combined, turn through greater than 540°, the resonator turns including at least one left hand turn and one right hand turn.

- 2. (Original) The resonant circuit of claim 1, wherein the at least one high temperature superconducting resonator is formed using a thallium-based superconductor.
- 3. (Original) The resonant circuit of claim 1, wherein the at least one high temperature superconducting resonator is formed using a yttrium-based material.
- 4. (Original) The resonant circuit of claim 1, wherein the at least one high temperature superconducting resonator is formed using a bismuth-based material.
- 5. (Original) The tunable resonant circuit of claim 1, wherein the at least one high temperature superconducting resonator is formed with an epitaxial thin film superconductor.

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6. (Original) The resonant circuit of claim 1, wherein the substrate comprises a dielectric material.

- 7. (Original) The resonant circuit of claim 6, wherein the substrate is a wafer having a diameter of two inches or less.
 - 8. (Original) The resonant circuit of claim 1 further including a tuning structure.